

Patent Claims

1. An IR (incremental redundancy) memory for an EGPRS (enhanced general packet radio service) receiver of a mobile station (MS), which receives data from a base station (BS) via a data transmission channel, the IR memory (1) having:
- a) a first memory area (1a) for buffer-storing a specific number of data blocks with a predetermined first data resolution ( $R_1$ );
  - b) a second memory area (1b) for buffer-storing erroneously decoded data blocks,
  - c) the second memory area (1b) storing the erroneously decoded data blocks with a second data resolution ( $R_2$ ), which is lower than the first data resolution ( $R_1$ ), and
  - d) it being possible for the second data resolution ( $R_2$ ) with which the erroneously decoded data blocks are stored in the second memory area (1b) of the IR memory (1) to be changed over adaptively between different resolution levels in a manner dependent on a burst data transmission signal quality measured by the receiver.
2. The IR memory as claimed in claim 1, characterized in that the number of data blocks that can be stored in the first memory area (1a) of the IR memory (1) depends on the internal signal delay within the mobile station (MS).
3. The IR memory as claimed in claim 1, characterized in that the number of data blocks that can be stored in the second memory area (1b) of the IR memory (1) depends on the polling period of the data transmission channel and on the round trip delay.

4. The IR memory as claimed in claim 1,  
characterized  
in that the resolution levels of the second data  
resolution ( $R_2$ ) are 2 bits, 3 bits or 4 bits.
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5. The IR memory as claimed in claim 1,  
characterized  
in that the first data resolution ( $R_1$ ) is 5 bits.
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6. The IR memory as claimed in claim 1,  
characterized  
in that the IR memory (1) is connected, on the input  
side, to a reception buffer memory for data blocks.
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7. The IR memory as claimed in claim 1,  
characterized  
in that the IR memory (1) is connected to a decoder on  
the output side.
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8. The IR memory as claimed claim 1,  
characterized  
in that the data blocks are RLC (radio link control)  
data blocks.
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9. The IR memory as claimed in claim 1,  
characterized  
in that the data blocks are MCS-coded.